Towards Effective Co-Management of Bunaken National Park



NRM/EPIQ SULUT

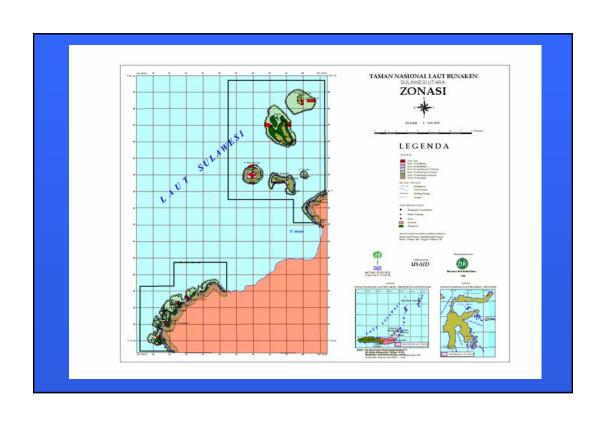
Overview of Presentation

- Background on Bunaken National Park
- Zonation Revision Process
- Involvement of Private Sector in Management
- Scientific Monitoring Program
- Bunaken National Park Management Advisory Board
- □ Park Entrance Fee System
- Lessons Learned
- **■** THE FUTURE???

Bunaken National Marine Park



- Established 1991, overseen by BTNB
- ~90,000 hectares, including 5 islands and North Sulawesi mainland
- exceptionally diverse
- →21 villages in park
- Well-developed marine tourism industry





Despite national park status and significant funding inputs,

the park has suffered a slow, continuous degradation due to a number of threats....





Coral mining



AND TRASH!!!!

Blast fishing



Diver/anchor damage



Cyanide fishing

Management Shortcomings

- Problematic zonation system (2 conflicting ones!!)
- Resentment between central and local government agencies, weakened position of BTNB
- Leading to increasingly vocal calls for better management by the private tourism sector!



BTNB has requested assistance of NRM/EPIQ for:

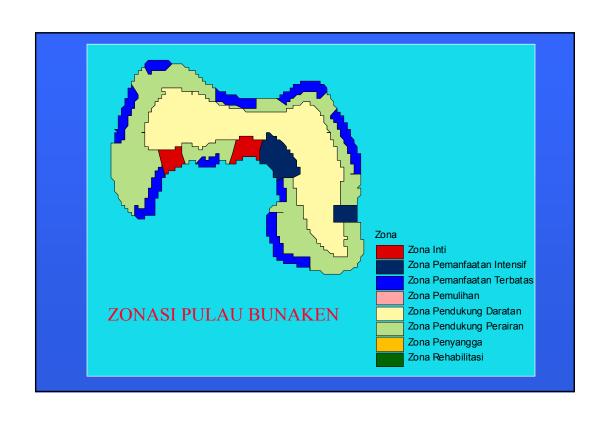
- Participatory zonation revision
- ☐ Involvement of private sector in management
- Development of park entrance fee system



Zonation Revision

- □ 2 conflicting zonation systems
- Unclear demarcation of zones
- Ambiguous rules for each zone

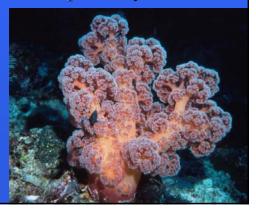


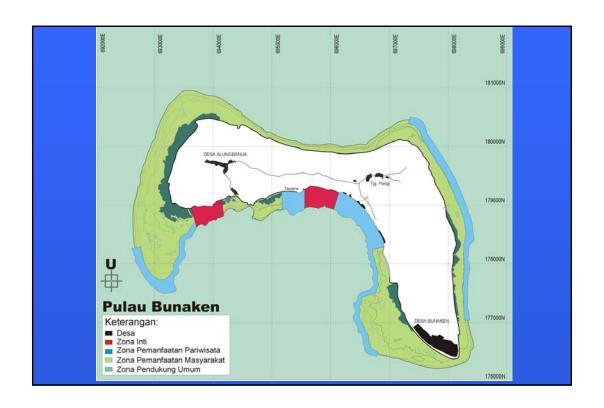


Zonation Revision

- Initial attempts in govt offices stagnated
- New focus on 2 primary user groups: villagers and marine tourism operators (in conjunction with BTNB rangers)
- Village-by-village process, starting with Bunaken Island
- Accommodate current use patterns, formulate *explicit* rules for each zone
- Parallel meetings with 2 user groups, using combination of open and focal group meetings

- Bunaken island completed in late 2000, signed off as agreeement between BTNB and 2 village governments
- Both user groups willing to compromise
- Draft revision widely distributed, 1 month public commentary period, then "firestorm of publicity".





Features of Bunaken Zonation Revision

- 8 original zones reduced to 3 primary zones with clearly understandable zone names
- No more "jigsaw puzzle" zonation 11 original tourism zones reduced to 3 large ones with clearly demarcated borders.
- EXPLICIT rules for each zone that reflect a compromise of different user groups' activities.

Expansion of Zonation Revision Process

- Using Bunaken zonation as base model
- Involving other key partners in facilitating the process, including BTNB rangers, Kelola and the Bunaken Concerned Citizens Forum
- Socialization already begun, revision process started in 4 additional villages
- Target of completion by December 2001

Private Sector Involvement in Management Material Materi

NSWA

- •Formed in 1998, 7 dive operators
- •Now includes 14 operators, with strong links to BTNB, environmental NGO's



NSWA Activities — "3 E's" Education, Employment, Enforcement

EDUCATION:

- Supported printing of NRM/EPIQ coral reef educational cartoon books
- Scholarship donation program
- Mooring buoy design competition for villagers
- Sponsored a PADI Project AWARE workshop on Marine Resource Management by Dive Professionals
- Sponsored an Earth Day 2001 Reef Cleanup for Bunaken Villagers
- Donated coral reef identification books/photos to community information centers

NSWA Activities - "3 E's"

EMPLOYMENT:

- Committed to hiring more villagers directly in operations (boatmen, dive guides, receptionists)
- Village handicrafts program
- Purchase of pelagic fish products from villagers (mahimahi, etc)
- Recruited 21 Bunaken villagers into joint patrol system









NSWA Activities - "3 E's"

ENFORCEMENT:

- Strict ban on anchoring
- Innovative Patrol Agreement with BTNB/SATPOLAIR, using Bunaken Preservation Fund (\$5/diver) to fund patrols (with NRM matching grant). Highly successful in curbing DFP and socializing new zonation system!
- Villager involvement
- "Hand-off" to BNPMAB
- Training, WWF Grant

Private Sector Involvment (continued)

- NSWA model now being applied in Komodo National Park (TNC) and Bali Barat National Park (WWF)
- With entrance fee implementation, now have involvement of new private sector groups: travel agents, Bunaken cottage owners, charter boats



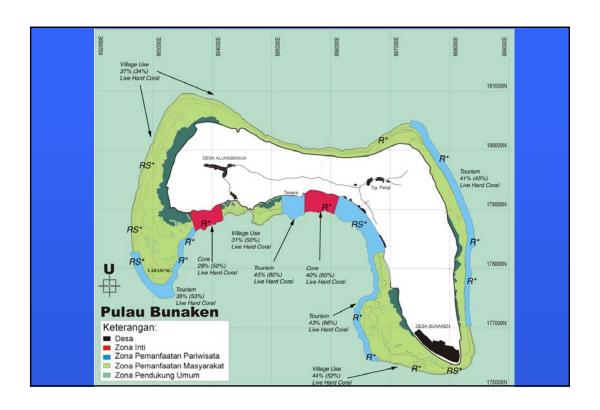
Scientific Monitoring Program

- Provide a baseline against which to judge success of new zonation and increased patrols
- First year focus on Bunaken Island only, with emphasis on comparison between zones
- Benthic habitat monitoring using manta tow and line intercept transects
- Fish and fishery monitoring to be implemented in collaboration with WWF-Wallacea with support of TNC in May-June 2001

Scientific Monitoring Program Manta Tow Results

- □ 144 tows completed
- Average hard coral cover of 38.8%, other benthic live cover of 13.5%
- No significant differences between zones, though tourism>village>core conservation
- Clear decrease in hard coral since 1998 (bleaching?), though strong evidence of active recovery





Scientific Monitoring Program Transect Results

- 36 twenty meter transects completed
- Average hard coral cover of 44.7%, other benthic live cover of 13.1% (Komodo: 19% hard coral cover in 1998)
- No significant differences between zones-important mgmt implications!
- MANY new hard coral recruits observed strong indications of active recovery
- Dead coral consisted mostly of standing dead, not rubble excellent outlook for recovery

Towards true co-management of TNB... Bunaken National Park Management Advisory Board (BNPMAB)



BNPMAB Composition

- Established by Governor's Decree #233/2000, sworn in by Minister of Forestry
- 15 seats on board: 8 non-governmental, 7 governmental
 - Vice Governor SULUT
 - 5 village representatives from FMPTNB
 - BTNB
 - WALHI (NGO)
 - Dinas Pariwisata
 - Dinas Perikanan
 - UNSRAT
 - Private Sector (NSWA)
 - BAPPEDALDA Tingkat I, II
- Executive Secretariat for operational activities



BNPMAB: 2 Primary Functions

Coordination of all policies and activities of government agencies and NGO's working in TNB

■ Formulation and funding of conservation programs

for TNB



BNPMAB: First year priorities



- Establishment of park entrance fee system
- Expansion of BTNB/NSWA/Satpolair Joint Patrol System
- Continuation of zonation revision process
- Develop conservation education program in 21 villages
- Implement trash collection program on Bunaken Island

BNPMAB: Future Plans



- Environmentally-friendly village development programs
 - Village piers, water supply and sanitation systems
- Development and promotion of alternative ecotourism
 - Manado Tua volcano climb, dugong and mangrove tourism
- Conservation information centers in all villages

BNPMAB: Funding Sources

- TNB entrance fee system (PERDA SULUT No. 14/2000)
- □ Grants from international donors (WWF, NRM, dll)
- Annual budgets of agencies included in BNPMAB



TNB Entrance Fee System

- Established by PERDA, agreed to as a pilot project by PKA
- Dual system
 - Foreign (numbered plastic tag system), Rp 75,000/year
 - Domestic (ticket system), Rp 2500/day
- Distribution of proceeds
 - 80% BNPMAB
 - 20% National, provincial, district, city govt
- Projected revenues of Rp 1 billion per year

TNB Entrance Fee System

- Developed through close consultation with BTNB, private sector, provincial government and national government agencies
- Fees reflect value of resource to user (willingness to pay surveys)

TNB Entrance Fee System

- "Soft Opening" on 15 March 2001. Auction of first 10 tags, NSWA begins selling tags. In 6 weeks, 1130 tags sold for over Rp 100 million!
- "Official Opening" on 3 May after extensive socialization to tourism sector (meetings, articles, FAQ sheets, announcements, billboards).
- Entrance/Ticket Gates on Bunaken, patrol system to check compliance.
- Extremely well-received by foreign tourists PARTICULARLY the patrol system!

"Lessons Learned #2"



PROBLEM: Democratic representation subsumed by: Vocal Minority Syndrome (VMS) Village Jealousy Factor (VJF)



PROBLEM: Democratic process subsumed.

SOLUTION: Democracy is a long-term process (44 meetings in 8 months for one island!!). Must continually emphasize participative approach despite longer process. Future help with "enabling conditions?"

PROBLEM: Minimal communication within agencies (representation problem)

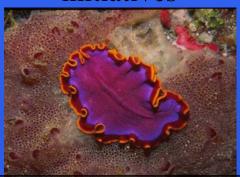


Problem: Within agency communication

Solution: Try to involve as many layers of the bureaucracy of each agency as possible. Host occasional meetings for entire staff of one agency. Example of BTNB rangers.

INTERESTING OBSERVATION 1:

Park villages that are Kelola Focus Sites are much more "in tune" with and supportive of management initiatives



INTERESTING OBSERVATION 2:

"Soft Opening" of entrance fee system provided "proof" to nonbelievers that the system is viable and in fact welcomed by tourists.



INTERESTING OBSERVATION 3:

Provincial government *loves* the BNPMAB – provides strong example of role for provincial-level agencies in NRM.



A Look to the Future...



Institutional Strengthening of Co-Management Partners

- BNPMAB. Develop into a world-class mgmt body like GBRMPA
- Forum MPTNB. Encourage democratic process at village level and attain true village representation
- BTNB. Vitalization underway! Need to anticipate changes/opportunities in transition to DKP

Emphasis on Monitoring

- Expand throughout park
- Necessary to:
 - gauge effectiveness of programs
 - highlight problem areas
 - "prove" utility of zonation system to communities
- Provide a better scientific basis to management decisions that are currently based on compromise

Bunaken as an MPA "Center of Excellence"

- Training center for other Indonesian MPA's
 - Wakatobi, Taka Bone Rate
 - Komodo, Bali Barat
- Model for development of new MPA's
 - Lembeh Strait, Sangihe-Talaud
- Plans for cooperation with WWF, TNC, CRMP, Packard
- Strategic position in the Sulu-Sulawesi Seas Ecoregion a marine biodiversity hotspot and established priority region, and now a proposed Global Marine Heritage Site and ICRAN pilot site.

VIVA BUNAKEN!

